

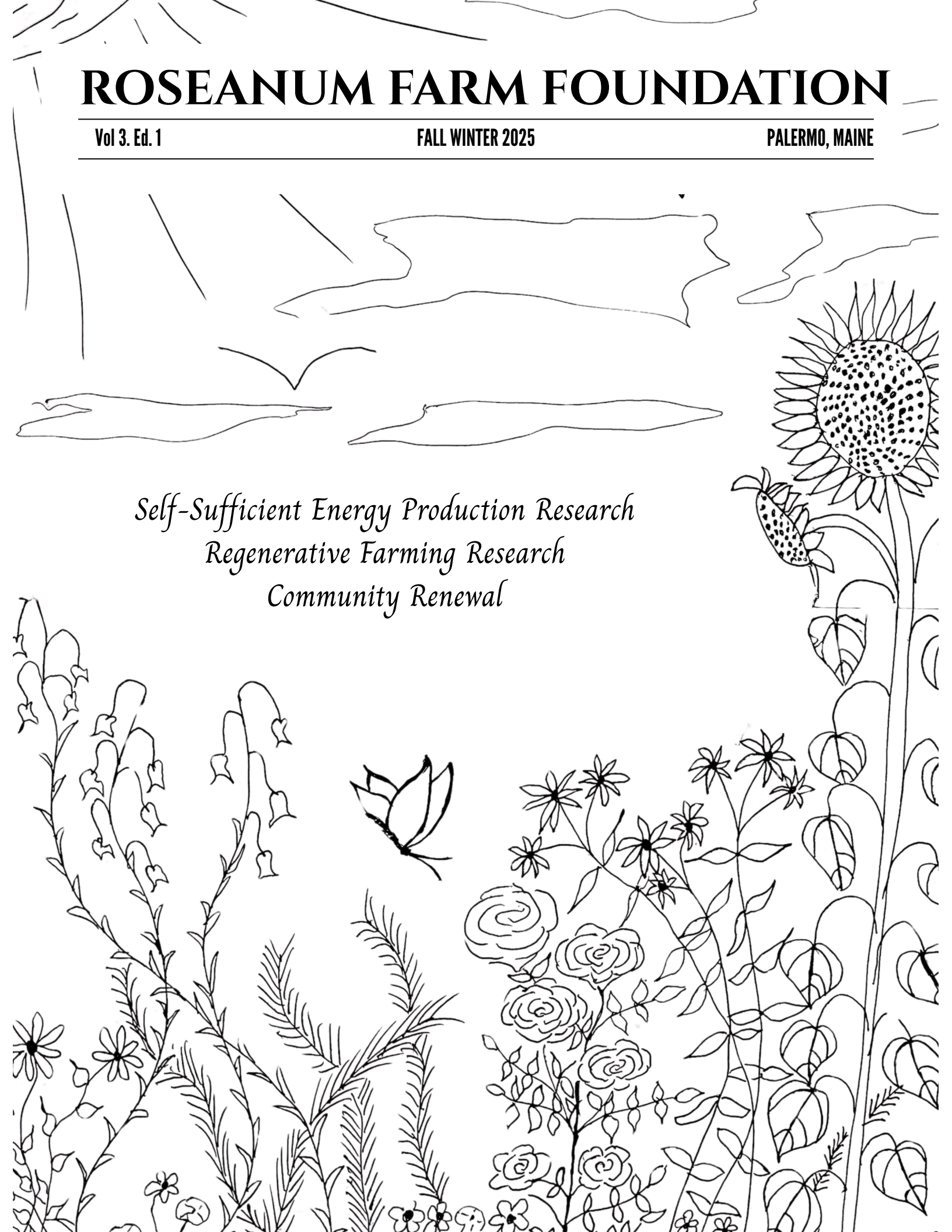
ROSEANUM FARM FOUNDATION

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FALL WINTER 2025

PALERMO, MAINE

*Self-Sufficient Energy Production Research
Regenerative Farming Research
Community Renewal*





Roseanum Farm Foundation

Our Mission: to research and practice sustainable and regenerative farming, including self-sufficient energy production, education, and community renewal.

The 2025 season was characterized by extensive work and exploration with the Living Soil Network. Roseanum Foundation and Living Soil Network worked in collaboration to bring more fields into soil suitable for nourishing food cultivation. Living Soil Network is a non-profit with the mission “to transform unhealthy soils into living fertile ecosystems.” Learn more about their work at: LivingSoilNetwork.com “It’s an opportunity to demonstrate how diverse microbial soil ecosystems go far beyond organic farming practices in providing nutrient dense, delicious and healing food, in cleaning up / protecting our waterways and surrounding environments (because we don’t use any inputs other than microbes) and in providing economic stability for farmers and food security for our communities.” –Robin from Living Soil Network

Spero and Robin are both natural medicine practitioners. After years of personally experiencing the profound healing properties of food grown in living soil, they are particularly excited about sharing the farm’s produce with their natural medicine clientele.

Regenerative Farming Research

This year we worked with Living Soil and focused on establishing infrastructure for an expanded commercial farming operation. This included:

- 1) Establishing soil infrastructure (all the methods the Living Soil technique employs to restore a diverse microbial ecosystem to the soil)
- 2) Creating workable beds: removal of rocks and weeds (a lot harder than it sounds)
- 3) Installing a drip line irrigation system in the beds
- 4) Putting up fencing (to protect crops from wildlife)
- 5) Planting cover crops where appropriate
- 6) Planting crops where appropriate: tomatoes, corn, potatoes, pumpkins, squash



Developed about one acre of wheat field from raw pasture.

Turning raw pasture into wheat field required numerous passes of various tractors, implements, and compost injections. A keyline plow was used to make deep furrows and shake the earth from beneath the surface—it does not move lower soil to upper soil. Compost extracts were dripped into the soil at the same time the keyline plow was moving through.

Because of the drought, the cover crop planted immediately after the inoculation did not take hold. It is a three part process to transform a field: (1) Keyline plow is used to address the compaction layer, (2) running a compost tea drip at the same time, allowing the compost tea to go into the new furrows, as microbes cannot penetrate the compaction layer, (3) planting a cover crop, which allows the microbes a chance to create their home and ecosystem in the soil. The cover crop in June did not grow due to the drought, leading to weed grow-back.

Two primary challenges are insect pressure and weed pressure, which stress the desired crop. Right now, the new microbial ecosystem is only preliminarily established—we will need to repeat the process next season: the keyline plow, followed by compost drip and cover crop. Winter wheat from Maine Grain Alliance was planted early September. Wheat is harvested mid-summer.

Vegetable Garden Expansion: Added about a quarter of acre

This year, we have more than doubled the vegetable garden acreage.

The entire new area was worked with Living Soil compost tea and injections to break up compaction.

Vegetables were grown in about half of the space, and the entire area was prepared for winter with a cover crop of peas and oats.

On October 18th, 400 feet of garlic was planted—about 2000 bulbs.

Most of pre-existing garden space was planted with Living Soil Network vegetables as well—this included one hoop house and one of the smaller gardens.



Compost Tea Maker

The compost tea brewer is a custom designed machine by Living Soil Network. Assembled on site, it aerates the compost tea mixture over a period of time. The plywood box is sound insulation.

The device is a cylindrical plastic bucket tapering to a cone bottom. An air pump (like in an aquarium) is placed in the bottom of the cone, the bucket is filled with water, and the biologically complete compost is added while aerating with the pump. The compost is massaged by hand while also aerated in the water, creating an oxygen burst. Beneficial microbes are aerobic, which use the oxygen for a growth spurt and repopulation/ multiplication.

A 2.5 gallon bucket of compost, once aerated into compost tea, can be used as a foliar spray for a quarter acre of vegetable crop. The microbes create a film of living protection over the plant, and the insects flying past do not recognize the plant as food. They also feed the plant via nutrient cycling, microbes eating microbes and then pooping out nutrients.

Typically, a soil drench is compost, massaged into water, without the bubbling, but with the wheat and other farm processes we did a light compost tea.

Compost tea is typically bubbled for a period of time—hours to days--and while this is ongoing the operator is watching the life cycle of the microbes using samples and a microscope to determine the optimum time to stop the process and apply the tea. The objective is to maintain the optimum level of aerobic microbes.

Homeopathic/ Energetics

Living Soil Network experimented with a couple of homeopathic formulas to combat striped cucumber beetle, Colorado potato beetle, and also squash beetles, and felt these were very successful. 90% of the pests either died or left within one week of application. Future experimentation is necessary. The homeopathics were applied by spraying.

Volunteer Network

There were two big volunteer days on the farm. In the spring potatoes, corn, seeds, and seedlings were planted by volunteers brought in by Living Soil Network.

In October, garlic was planted with a big volunteer group.

Each day culminated with a delicious meal prepared by Robin and friends and a good time was had by all!

Thought and Preparation in Developing a CSA for 2026

The hope is to find 20 CSA customers for the 2026 season. The plan is to send a truck to Portland Area once a week with a load of produce, including blueberries.

2026 Garden and Wheat Expansion

Over the next two years, we plan to continue to expand the garden until two full acres are under production in vegetables, and two acres are growing wheat.

The soil here is primarily Marlow fine sandy loam.

Assessment after year three of working with the Living Soil Methodology

The soil is responding to the compost teas and making improvements. The corn that was planted had no corn borers, and the potato harvest was good. There was a massive tomato harvest.

The ways Living Soil assesses improvement is by looking at insect pressure and weed pressure—if the soil is actually a diverse microbial eco-system, the weed pressure will be reduced. The by-product is that plants have strong and vital immune systems, which reduces insect pressure.

There are visible changes in the soil—it is less compacted, softer, and more workable- it has more structure and more air.



BIODYNAMIC SPRAYS

On November 3rd, Biodynamic Compound Spray, which includes seven of the biodynamic preps, was sprayed on the orchard and blueberry field.

Our goal over the New Year period of 2025-2026 is to perform the Three Kings Spray, which is a biodynamic preparation.

RIP BIG RED

The beloved and very old rooster passed away. He was a good bird. We don't know when he was born, but he was full grown when we received him in 2020. He lived a long life and protected the hens from raccoons and other predators many courageous times.



FROZEN BLUEBERRIES

700 pounds of blueberries were frozen and we are developing a frozen blueberry market over the coming weeks and months. Maintaining a wild blueberry field takes effort to prevent it from going back to birch and pine. This field is too rocky to be mowed and we do not plan to burn it; which means that small trees must be removed by hand.



PEACH HARVEST

Fifty pounds of peaches were harvested for the first time, from three trees planted in 2021.



REFRIGERATED ROOM

In preparation for the 2026 growing season and the plan to distribute to Portland area, we are building a cold storage room which will act as vegetable preservation in between truck runs.

ADDITIONAL IRRIGATION

We reactivated an old well that was not being used in order to provide additional irrigation for the fields.



FIBER EXPERIMENTS

Ronda has spearheaded cold soaking the sheep wool, then skirting (cleaning bits of hay and straw), then carding into roving, and finally, spinning.



Self-Sufficient Energy Production Research

Some research was done in the sky camera system, but further exploration of different off-the-shelf camera bodies is required. Claude AI was found to be the most suitable system for writing python scripts allowing automated video stream processing and matching; but everything is still in an incipient form.

Community Renewal

We hosted a Michaelmas celebration for the fifth season in a row. Cider pressing, nature observation, song, music, and discussions featured.



Sky Camera Timelapse Project--in process

